AMENDMENTS

Listing of Claims:

The following listing of claims replaces all previous listings or versions thereof:

1. – 2. (Canceled)

3. (Previously presented) The method of claim 38, wherein said tissue sample is a hair follicle.

4. (Original) The method of claim 1, wherein said tissue sample comprises buccal mucosa tissue.

5. (Original) The method of claim 1, wherein said tissue sample comprises a pap-smear sample.

6. (Original) The method of claim 1, wherein said tissue sample comprises bladder-wash cells.

7. (Original) The method of claim 1, wherein said tissue sample comprises skin scrapings.

8. (Previously presented) The method of claim 38, wherein determining growth factor receptor phosphorylation comprises:

(a) obtaining a sample comprising the growth factor receptor;

(b) contacting the sample with an anti-phosphorylated growth factor receptor antibody;

(c) detecting the bound antibody.

9. (Original) The method of claim 8, wherein the antibody further comprises a detectable label.

10. (Original) The method of claim 8, wherein a second antibody that comprises a detectable label is contacted prior to the detection.

11. (Original) The method of claims 9 and 10, wherein the detectable label is selected from a group comprising a fluor, an enzyme, or a radionuclide.

12. (Original) The method of claim 8, wherein said detecting comprises immunoflourescence.

13. (Original) The method of claim 8, wherein said detecting comprises colorimetric detection.

14. (Previously presented) The method of claim 38, wherein the patient has cancer of the breast, prostrate, colon, pancreas, head and neck, bladder, blood, bone, bone marrow, brain, esophagus, gastrointestine, brain, kidney, liver, lung, nasopharynx, ovary, skin, stomach, or uterus.

15.-37. (Canceled)

38. (Currently amended) A method for determining the effectiveness of a cancer treatment comprising:

(a) obtaining ~~a non-tumor~~ non-tumor skin, mucosal or hair follicle tissue ~~sample~~ samples by non-invasive procedures from a patient before and after a patient undergoes ~~undergoing the~~ cancer treatment with a chemotherapeutic agent, wherein i) said cancer is growth factor related and ~~expresses a~~ overexpresses an epidermal growth factor receptor, ii) said cancer treatment is directed to said growth factor receptor, and iii) said chemotherapeutic agent is a protein kinase inhibitor that reduces phosphorylation of said growth factor receptor; ~~and~~

(b) determining growth factor receptor phosphorylation in said tissues~~tissue~~; and

(c) comparing the growth factor receptor phosphorylation in the tissue obtained before treatment to the growth factor receptor phosphorylation in the tissue obtained after treatment, wherein a reduction of growth factor receptor phosphorylation in the tissue obtained after treatment as compared to that in the tissue obtained before treatment is indicative of the effectiveness of the cancer treatment.

39. (Previously presented) The method of claim 38, wherein said protein kinase inhibitor is a tyrosine kinase inhibitor.

40. (Previously presented) The method of claim 39, wherein said chemotherapeutic agent is PKI166.

41. (Previously presented) The method of claim 39, wherein said chemotherapeutic agent is the C225 antibody.

42. - 43. (Canceled)